

REMARKS

Claims 1-38 are pending in this application, of which claims 1, 8 and 32 are in independent form. Favorable reconsideration is requested in view of the following remarks.

The Examiner objected to the original abstract under MPEP §608.01(b) as not reflecting the inventive feature of the claimed invention to distinguish over the prior art.

The Applicants contend that the abstract, as presented satisfies the requirements of MPEP §608.01(b). The language in the abstract reflects the contents of the disclosure. Furthermore, the abstract is sufficiently clear such that the U.S. Patent and Trademark Office and the public could determine quickly from a cursory inspection the nature and gist of the technical disclosure.

The Examiner rejected claims 2-7 and 9-25 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Applicants contend that claim 2, as filed, particularly points out and distinctly claims the subject matter which the Applicants regard as their invention. Claim 2 recites a μ IP stack comprised of "an entry number field; a microinstruction pointer (μ IP) field; a back pointer field; a retirement indicator field; and a return pointer field." The term "field" is permissible under 35 U.S.C. §112 since it is a commonly used term in computer science. Moreover, the specification, e.g., FIG. 3 and accompanying description pages 12-14, describe each field in sufficient detail such that those skilled in the art would understand the use of field. Since the claim is written to one of ordinary skill in the art, it is incumbent upon the examiner to show why one of ordinary skill in the art would not understand what is claimed. Accordingly, claim 2 is proper under 35 U.S.C. §112.

The foregoing remarks also apply to independent claim 9 and dependent claims 3-7 and 10-25, all of which have corresponding language.

The Examiner rejected Claims 1, 8, and 26-38 under 35 U.S.C. §102(b) as being anticipated by Beckwith et al., U.S. Patent No. 5,136,696.

Claim 1 is distinct over Beckwith. Claim 1 calls for "...an out-of-order microinstruction pointer (μ IP) stack for storing pointers in a microcode (μ code) execution core, the pointers

placed on the out-of order microinstruction pointer stack and removed from the microinstruction pointer stack before it is known if a sequence of microinstructions pointed to by the pointers is valid.”

Beckwith neither describes nor suggests an out-of-order microinstruction pointer (μ IP) stack. Even though Beckwith pushes microinstructions onto a stack, a common practice in processor design to handle branch operations, these microinstructions are not sequenced out-of-order. “The microinstructions of the instruction interpreter are sequenced in the same manner as a normal instruction sequence.” (Beckwith, col. 8, lines 23-25). Therefore, Beckwith suggests an ordered microinstruction pointer stack. The ordered microinstruction pointer stack does not take microinstructions out-of-order or remove pointers from the microinstruction pointer stack “before it is known if a sequence of microinstructions pointed to by the pointers is valid.”

Claim 1 further distinguishes over Beckwith, since Beckwith neither describes nor suggests that the processor is implemented as a three way super scalar, pipelined architecture. Nowhere in Beckwith does he mention such an implementation. Accordingly, claim 1 is allowable over Beckwith at least for the reasons discussed above.

Claims 8 and 26-38 are allowable either because they depend either from claim 8 or from claim 32, both of which contain analogous limitations as claim 1.

The art cited but not applied by the examiner is seen as neither describing nor suggesting the invention whether taken separately or in combination with Beckwith.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

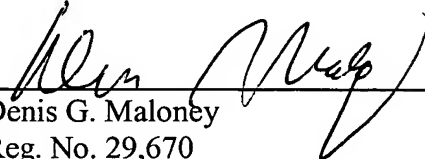
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Enclosed is a \$450.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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